
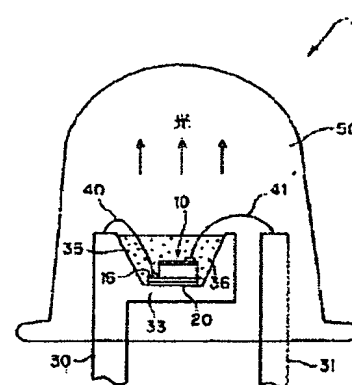


LIGHT EMITTING DEVICE AND METHOD THEREFOR**Patent number:** JP2004186278**Publication date:** 2004-07-02**Inventor:** YOSHIMURA NAOIKI; SUEHIRO YOSHINOBU; TAKAHASHI YUJI; OTA KOICHI; MITOMO MAMORU; ENDO TADASHI;
KOMATSU MASAKAZU**Applicant:** TOYODA GOSEI KK; NAT INST FOR MATERIALS SCIENCE**Classification:****- International:** H01L33/00; H01L33/00; (IPC1-7): H01L33/00; C09K11/08; C09K11/64; C09K11/79; C09K11/80**- european:****Application number:** JP20020349286 20021129**Priority number(s):** JP20020349286 20021129**Also published as:** US2005001225 (A1)[Report a data error here](#)**Abstract of JP2004186278****PROBLEM TO BE SOLVED:** To provide a light emitting device which can emit red light more conspicuously than that of the ordinary white LED (color rendering of red can be enhanced).**SOLUTION:** A light emitting element 10 is mounted to a cup 33 provided to a lead frame 30 using a bonding agent 20. Wires 40, 41 connected to the lead frames 30, 31 are bonded to the p-electrode and n-electrode of this light emitting element 10. Moreover, the cup 33 is filled with the epoxy resin 35 in which a fluorescent material 36 is uniformly dispersed. This light emitting element 10, a part of the lead frames 30, 31, and wires 40, 41 are sealed with a sealing resin 50 consisting of the epoxy resin. This LED1 is provided with the light emitting element 10 in which the wavelength of emitted light is in the range of 360 nm to 550 nm, an oxygen nitride formed by activating the rare earth element, and a fluorescent material 36 based on the lanthanum silicon nitride obtained by activating the cerium ion. The light of light emitting element 10 is partly converted in the wavelength with the fluorescent material 36 and is then released.

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